

**Notice of Allowability**

Application No.

10/073,630

Examiner

Jason Mitchell

Applicant(s)

KIMELMAN ET AL.

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to papers filed 11/27/07.
2. ☒ The allowed claim(s) is/are 1, 3-10, 12-13 (renumbered 1-11).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 1/14/08.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_



LEWIS A. BULLOCK, JR.  
PRIMARY EXAMINER

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael Buchenhorner (reg. # 33,162) on 1/14/08.

#### **The claims have been amended as follows:**

1. A method of selecting a lowest cost selectable implementation from a plurality of selectable implementations for a component of a computer program, the method comprising steps of:

assigning a cost estimation formula to each one of the plurality of selectable implementations;

instrumenting said component to gather cost related state information indicating a state of the component during at least a partial run of said computer program;

computing an estimated cost for each one of the plurality of selectable implementations during said partial run by executing each selectable implementation's associated cost estimation formula, wherein the cost estimation formula takes as input the gathered cost related state information; and

based on the estimated cost, selecting at runtime one of the plurality of selectable implementations for a subsequent at least partial run of the computer program, said one of the plurality of selectable implementations selected being the one with the lowest estimated cost.

5. A computer readable storage medium including computer instructions for carrying out a method of minimizing the cost of using a component of a computer program, the method comprising steps of:

assigning a cost estimation formula to each one of the plurality of selectable implementations;

instrumenting the component to gather cost related state information indicating a state of the component during at least a partial run of said program;

computing an estimated cost for each one of the plurality of selectable implementations during said partial run by executing each selectable implementation's associated cost estimation formula, wherein the cost estimation formula takes as input the gathered cost related state information; and

based on the estimated cost, selecting at runtime one of the plurality of selectable implementations for a subsequent at least partial run of the computer program, said one of the plurality of selectable implementations selected being the one with the lowest estimated cost.

Art Unit: 2193

9. A computer system including a processor for selecting a lowest cost selectable implementation from a plurality of selectable implementations for a component of a computer program, the system comprising:

receiving a plurality of explicitly selectable alternative implementations of the component of a computer program;

receiving messages from another one of the components and sending messages thereto;

wherein the component comprises instrumentation for gathering cost related state information during at least a partial run of the computer program, the cost-related state information comprising a kind of use that is made of the component or corresponding decisions made for other components that interact with said component;

a cost estimator for computing, during said partial run, an estimated cost for each selectable implementation by executing each selectable implementation's associated cost estimation formula, wherein the cost estimation formula takes as input the gathered cost related state information; and

based on the estimated cost, selecting at runtime one of the plurality of selectable implementations for a subsequent at least partial run of the computer program, said one of the plurality of selectable implementations selected being the one with the lowest cost.

11. (Canceled)

Art Unit: 2193

All other claims remain unchanged.


### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Mitchell whose telephone number is (571) 272-3728. The examiner can normally be reached on Monday-Thursday and alternate Fridays 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason Mitchell/  
Jason Mitchell  
1/14/08

  
LEWIS A. BULLOCK, JR.  
PRIMARY EXAMINER